

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-10				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-10-060			Contract Period 11/30/2010 To 07/31/2013 Base Option Period Number 2			Title of Work Assignment/SF Site Name Technical Support for CRWU				
Contractor COMPUTER SCIENCES CORPORATION					Specify Section and paragraph of Contract SOW 2.10, 2.4, 2.15, 2.16, 3.1.13, 3.1.14, 3.1.18					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 08/01/2012 To 07/31/2013				
Comments: This action establishes WA 2-10 in Option Period 2 and requests a workplan, staffing plan, and estimated budget for supporting the attached PWS. The Agency estimates 3,500 direct labor hours will be needed to support the requirement.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO (Max 2) <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/30/2010 To 07/31/2013										
This Action:						3,500				
Total:						3,500				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Curt Baranowski						Branch/Mail Code:				
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						FAX Number:				
Project Officer Name Nancy Muzzy						Branch/Mail Code:				
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						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Cathy Basu						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 513-487-2042				
						FAX Number:				

**WORK ASSIGNMENT
PERFORMANCE WORK STATEMENT**

Contract No. EP-C-10-060

Work Assignment: 2-10

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Task Managers: John Whitley and Curt Baranowski
IOE 3,500 hours
Period of Performance: August 1, 2012 to July 31, 2013

Title: Climate Ready Water Utilities (CRWU) Related Activities -- Support, Education, Outreach, Communication, Training, and Coordination

PWS Sections: 2.10, 2.4, 2.15, 2.16, 3.1.13, 3.1.14, 3.1.18

I. PURPOSE

The purpose of this work assignment is to reflect priorities and requirements of the Water Security Division in support of Climate Ready Water Utility (CRWU) related activities. The work assignment supports the U.S. Environmental Protection Agency's (EPA or Agency) efforts to examine climate-related activities for the Nation's drinking water, wastewater and storm water, hereinafter water sector, infrastructure. Water infrastructure is subject to threats from various entities, including those related to climate change. Climate change impacts will impose a daunting challenge to the water sector's ability to fulfill its public health and environmental mission. Extreme weather

events, sea level rise, temperature changes, and shifting precipitation and runoff patterns, all have significant implications for sustainability of the Nation's water sector. Regardless of actions to reduce future levels of greenhouse gases, the water sector will need to develop effective adaptation strategies to address climate change impacts. At the same time, the water sector can and should contribute to mitigation efforts through increased efficiencies.

This work assignment supports the mission of the Water Security Division (WSD) as described in the Water Security Strategy framework, which relates resources, activities, outputs, audience, short- and long-term outcomes to the WSD pillars of Prevention, Detection, Response, and Recovery. Additionally, this work assignment contributes to the commitments made in EPA's *Strategic Plan: 2011 to 2015* and EPA's *Homeland Security Strategy (2004)*. Under EPA's *Strategic Plan*, reference is made to Goal 2 (Clean and Safe Water), Objective 2.1 (Protecting Human Health), Sub-objective 2.1.1 (Water Safe to Drink), and to the Cross-Goal on homeland security. Under EPA's *Homeland Security Strategy*, reference is made to Objective 1 (Critical Infrastructure Protection).

To assist EPA in meeting this objective, the contractor shall be expected to provide support to EPA in its effort to develop and implement its Climate Ready Water Utilities (CRWU) initiative. Furthermore, the contract shall support EPA in its CRWU-related Integrated Water Resources Management (IWRM) or "Total Water Management" planning process efforts. IWRM is a process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare, paving the way towards sustainable development, in an equitable manner without compromising the sustainability of vital ecosystems.

Operationally, IWRM approaches involve applying knowledge from various disciplines as well as the insights from diverse stakeholders to devise and implement efficient, equitable and sustainable solutions to water and development problems. As such, IWRM is a comprehensive, participatory planning and implementation tool for managing and developing water resources in a way that balances social and economic needs, and that ensures the protection of ecosystems for future generations. Water's many different uses—for agriculture, for healthy ecosystems, for people and livelihoods—demands coordinated action. An IWRM approach is an open, flexible process, bringing together decision-makers across the various sectors that impact water resources, and bringing all stakeholders to the table to set policy and make sound, balanced decisions in response to specific water challenges faced.

Some of the principal components of IWRM as it relates to CRWU initiative are as follows:

- **Managing water resources at the basin or watershed scale.** This includes integrating land and water, upstream and downstream, groundwater, surface water, and coastal resources.
- **Optimizing supply.** This involves conducting assessments of surface and groundwater supplies, analyzing water balances, adopting wastewater reuse, and evaluating the environmental impacts of distribution and use options.
- **Managing demand.** This includes adopting cost recovery policies, utilizing water-efficient technologies, and establishing decentralized water management authorities.
- **Providing equitable access to water resources through participatory and transparent governance and management.** This may include support for effective water users' associations, involvement of marginalized groups, and consideration of gender issues.

- **Utilizing multi sector based approach to decision-making.** Authorities for managing water resources are employed responsibly and stakeholders have a share in the process.

Other related EPA efforts that intersect with the CRWU initiative include sustainable infrastructure, effective utility management, energy management, Climate-Ready Estuaries (CRE), and active and effective protective programs.

The intended audience for this project is drinking water, wastewater, and stormwater utilities, as well as other parties that support these utilities as they begin to understand and consider climate challenges to their systems, missions, and operations (i.e., water sector associations; interdependent sectors and actors; federal agencies; local, state, and federal government).

Partners in CRWU-related coordination efforts include but are not limited to the following:

- Drinking Water and Wastewater Associations and Stakeholders.
- EPA program offices such as Office of Air and Radiation; Office of Research and Development; and various other components of Office of Water (e.g., Office of Wastewater Management, Office of Wetlands, Oceans, and Watersheds, and Drinking Water Protection Division).
- Water Utility Climate Alliance.
- Federal Agencies.
- EPA Regional offices.

II. BACKGROUND:

The EPA's *2008 National Water Program Strategy: Response to Climate Change* identified the need to provide drinking water and wastewater utilities with easy-to-use resources to assess the risk associated with climate change and to identify potential adaptation strategies. EPA established the CRWU initiative to enable water sector utilities to develop and implement long-range plans that account for climate change impacts. The program recognizes that any comprehensive approach to climate change must include both adaptation and mitigation; it also seeks to engage a broad range of water sector stakeholders.

In fall of 2009, EPA formed a National Drinking Water Advisory Council (NDWAC) CRWU Working Group. The Working Group's charge was to evaluate the concept of "Climate Ready Water Utilities" and provide recommendations to the NDWAC on the development of an effective program for drinking water and wastewater utilities, including recommendations to:

1. Define and develop a baseline understanding of how to use available information to develop adaptation and mitigation strategies, including ways to integrate this information into existing complementary programs such as Effective Utility Management and Climate Ready Estuaries Program.
2. Identify climate change-related tools, training, and products that address short-term and long-term needs of water and wastewater utility managers, decision makers, and engineers, including ways to integrate these tools and training into existing programs.

3. Incorporate mechanisms to provide recognition or incentives that facilitate broad adoption of climate change adaptation and mitigation strategies by the water sector into existing recognition and awards programs or new recognition programs.

The NDWAC submitted its final report to the EPA January 2011; the recommendations found within the report are listed below.

NDWAC CRWU Recommendations

The EPA should:

1. Develop a well-coordinated program to articulate and support the adoption of climate ready behaviors by utilities.
2. Build out the concept of “climate ready” utilities based on the Findings and CRWU Adaptive Response Framework.
3. Establish for utility staff a climate change continuing education and training program.
4. Build on and strengthen advanced decision support models and to support utility climate change efforts.
5. Increase interdependent sector knowledge of water sector climate-related challenges and needs.
6. Improve and better integrate watershed planning and management in response to climate uncertainty and impacts.
7. Improve access to and dissemination of easy-to-understand and locally relevant climate information.
8. Better integrate climate change information into existing utility technical assistance initiatives.
9. Develop an adaptive regulatory capacity in response to potential climate change alteration of underlying ecological conditions and systems.
10. Develop a comprehensive water sector, climate change research strategy.
11. Advocate for better coordination of federal agency climate change programs and services.
12. Take the following early action steps in close cooperation with applicable federal agencies, non-governmental organizations, and water sector professional associations.
 - a. More fully articulate the elements of the adaptive framework.
 - b. Develop and articulate strategies for integrating climate change adaptation and mitigation approaches into existing utility priorities, on-going asset management and infrastructure repair and replacement efforts, and emergency response, capacity, and capital planning.

- c. Assure funding and other resources currently available for climate change is well coordinated, aligned to water sector needs, and available for a full range of adaptation strategies.
- d. Inform other Federal agencies about federally funded project design opportunities that will support water sector climate resilience and stress the importance of ensuring federally funded projects account for climate change considerations.
- e. Link climate ready adaptive response framework activities with EPA's Effective Utility Management and Climate Ready Estuaries programs to ensure climate readiness becomes part of on-going utility planning and management efforts.
- f. Establish a climate ready information sharing community and include climate ready criteria in current awards programs to spotlight current and future utility activity.

In coordination with water sector partners and stakeholders, EPA is developing a holistic framework under which climate change can be addressed at the utility level. EPA will work to implement as many of the NDWAC recommendations as possible in an effort to support utilities as they address climate change-related issues.

III. QA REQUIREMENTS

Secondary Data: This work assignment does not generate, utilize, or interpret primary or secondary data. The tasks in this work assignment do not require environmental measurements. Consistent with the Agency's quality assurance (QA) requirements, the contractor does not need to supplement the approved Quality Management Plan (QMP) of the contractor prepare a Project-Specific Quality Assurance Project Plan (PQAPP).

IV. DETAILED TASK DESCRIPTION:

All direction under this work assignment will be provided as written technical direction from the Task Manager or Work Assignment Manager, as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Project Officer and the Contracting Officer, and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA Work Assignment Manager (WAM) and EPA Project Officer (PO) in draft form for review and comment. The contractor shall incorporate WAM/Task Manager review comments into revisions of the drafts. All drafts and final reports shall be approved by the WAM.

The contractor shall perform the following tasks:

Task 0: Work Plan, Progress Evaluations, and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the metropolitan DC area, the contractor shall include information on plans to manage work and contract costs. In addition, the work plan shall specify that a project specific QAPP supplement to the QMP is not required. This task also includes monthly progress and financial reports. Monthly financial reports must include a table with the invoice LOE and cost amount broken out by the tasks in this WA. The work plan shall also provide an analysis of the existing and projected constraints, and the feasibility of accomplishing the project's purpose.

In addition, in each monthly progress report, the contractor shall, at the introduction to the discussion of this work assignment, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the work assignment. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing work assignments under this contract is not occurring.

The contractor shall ensure it possesses superior technical and editorial writing skills to support all above-mentioned efforts. Skills must include, but are not limited to the following: grammar, spelling, punctuation, flow, sentence structure, readability, and reading-ease.

It is imperative for WSD to track and measure progress and outcomes of efforts conducted under this work assignment. In order to illustrate success, WSD will be viewing not only individual work assignments to track progress and illustrate measures of progress, but we will be examining Division-wide progress. Where and when applicable, the contractor shall assist in these measure and outcome tracking efforts for the tasks conducted under this work assignment.

Deliverables: Work plan and monthly progress and financial reports.

Task 1: CRWU and Climate Change Support, Education, Outreach, and Training

In alignment with the findings and recommendations within the NDWAC CRWU report, EPA will continue to develop and implement its Climate Ready Water Utilities initiative. EPA will work with many other partners and stakeholders to implement this program. These groups include, but are not limited to, other EPA offices such as the Climate Ready Estuaries program; members of the CRWU NDWAC working group; federal, state, and local government partners; public agency actors; interdependent sectors; and water sector associations.

The contractor shall work with these partners and stakeholders to assist water sector utilities gain a better understanding of climate science and how they can implement aspects of the CRWU initiative to prepare for potential climate change-related impacts. The contractor will also support the EPA in identifying water sector climate-related research needs.

For all tasks, the contractor shall format all deliverables in Century Gothic, 10-point type. All draft documents shall also have continuous line numbers.

During Option Period 2 the contractor shall provide the following support, in accordance with appropriate technical direction:

DELIVERABLES	DATE
1. Develop outreach materials such as tutorials and/or fact sheets on the CRWU initiatives for conferences or other purposes. These materials may be abstracts, handouts, presentations, journal articles, briefings, etc. Assume development of five (5) individual products for estimation purposes.	TBD by technical direction.
2. NY State Department of Environmental Conservation (NYS DEC) CREAT2.0 Training -- participate in conference calls (assume 3) with the NYS DEC, other stakeholders, and EPA Region 2 Office.	TBD by technical direction.
3. Develop, prepare for, and hold a 1.5 day in-person or web-x CREAT2.0 training / workshop with the NYS DEC, other stakeholders, and EPA Region 2 Office. Workshop to be held in NY, exact location TBD; will assist NYS DEC build CRWU concepts into their programs. The contractor shall capture and document the process, outcomes, and lesson learned from the workshop. Assume travel for 1 contractor	TBD by technical direction.
4. Participate on follow-up conference calls (assume 2 total) with the above-mentioned NY group to solicit any additional feedback on the training / workshop.	TBD by technical direction.
5. Provide technical assistance for questions and help regarding CREAT2.0. Catalog feedback on CREAT2.0. The contractor shall assume 10 calls per month.	TBD by technical direction.
6. CRWU training and outreach. The contractor shall support EPA in the development and provision of webcasts promoting the holistic approach to CRWU resources (e.g., Toolbox, Adaptation Strategies Guide, Workshop Planner, CREAT, and NOAA RISAs). The CRWU webcasts will be held in 2 parts that will run no longer than 45 minutes each. The contractor shall assume 8 webcasts that will be provided over the option period. The contractor shall assume 2 individual webcasts on CREAT	TBD by technical direction.
7. Credit ratings reward pricing and infrastructure plans that encourage increased water use and revenue growth with	TBD by technical direction.

<p>disregard for even near-term supply constraints and likely disruptions due to climate and extreme weather changes.</p> <p>No current ratings methodologies reward water utilities with incentives for having water pricing that reflects scarcity, climate readiness, and encourages conservation. Working with rate setting agencies and insurers, EPA will assist the organizations in developing criteria and incentives that will help rate setters to:</p> <ul style="list-style-type: none"> • Understand the water sector's exposure to persistent drought, floods, temperature changes, and sea-level rise resulting from long-term climatic changes; • Encourage asset managers and insurers to assess and engage with utilities on water risks; • Request guidance from financial regulators for better disclosure of water and climate-related risks by municipal utilities; and • Encourage the use of green infrastructure that restores natural hydrologic systems, promotes rainwater harvesting and natural water capture, thus recharging aquifers and protecting water supplies. <p>The contractor shall support EPA with the above-mentioned work with credit ratings agencies, insurers, and financial regulators to identify risk to water utilities from climate and extreme weather changes. Assume the development of 2 documents.</p>	
<p>8. The contractor shall assist EPA in conducting a climate change related risk assessment at combined drinking water and wastewater utility using CREAT2.0. The contractor shall produce a utility-level risk assessment report using CREAT2.0 functionality, as well as capture and document the process, outcomes, and lesson learned from the assessment. Assume travel for 2 contractors (5 working days) and 3 webcasts.</p>	<p>TBD by technical direction.</p>

Subtask 1A: Adaptation Strategies Guide (ASG) Updates and Enhancements.**Task Manager: Curt Baranowski**

During Option Period 2 the contractor shall provide the following support, in accordance with appropriate technical direction:

DELIVERABLES	DATE
1. Updates to the ASG will ensure stakeholder comments are incorporated and that the climate science data and other content of the guide are consistent with the current knowledge and needs of the water sector. Climate science data for the ASG comes from existing peer-reviewed sources such as the U.S. Global Change Research Program reports; data is developed by more than 10 different federal agencies (e.g., USGS, NOAA, NASA, and EPA). The contractor should assume 1 ASG update for estimation purposes.	TBD by technical direction.
2. Enhancements to the ASG to add green infrastructure and energy efficiency components.	TBD by technical direction.

The contractor shall ensure it possesses superior technical and editorial writing skills to support all above-mentioned efforts. Skills must include, but are not limited to the following: grammar, spelling, punctuation, flow, sentence structure, readability, and reading-ease.

Task 2: Build On, Strengthen, and Apply Advanced Decision Support Models and Tools**Development of the Adaptive Response Framework (ARF) Web Site****Task Manager: Curt Baranowski**

The Adaptive Response Framework was developed by the NDWAC CRWU working group to guide utilities through an iterative adaptive management process that helps utilities identify the steps to take that build resilience to climate change impacts. This framework reflects the flexible response strategy that utility managers and water sector experts use to address climate change considerations.

EPA is redeveloping its CRWU website to build upon the ARF, allowing drinking water, wastewater, and stormwater utilities to explore the ARF elements by walking through a stepped and iterative process that gives users a better understanding of actions they can take at their utility to become more "Climate Ready." A working group of stakeholders was established and an in-person meeting of the group was held during Option Period 0 of this contract. Valuable insight and direction was provided to EPA on the development of the ARF concepts. In this option period the contractor shall provide the following support, in accordance with technical direction:

DELIVERABLES	DATE
1. Conduct conference calls/meetings with the working group to solicit feedback on the draft <i>ARF CRWU Web Site</i> and the path forward approach.	TBD by technical direction.
2. Finalize the <i>ARF CRWU Web Site</i> in collaboration with the working group and other stakeholders.	TBD by technical direction.

The contractor shall ensure it possesses superior technical and editorial writing skills to support all above-mentioned efforts. Skills must include, but are not limited to the following: grammar, spelling, punctuation, flow, sentence structure, readability, and reading-ease.

Task 3: CRWU Toolbox Improvement

Task Manager: John Whiter

The CRWU Toolbox offers access to climate-related information relevant to the water sector that is searchable by U.S. region, water utility type and size, climate change impact of interest, and climate change response strategies being considered. Resources in the CRWU Toolbox include:

- Descriptions of current activities by governments and utilities.
- Events including seminars, workshops, and training sessions.
- Reports, articles, and other publications.
- Programs that have available funding to support climate-related actions by utilities and municipalities.
- Tools and models designed to assist water utilities or water resource managers in decision making and risk assessment.

The CRWU toolbox is a collection of online resources that contains water-utility focused climate-relevant information. The resources included in the toolbox provide both general background information and information specific to a utility's size, type, region, and area of interest.

During Option Period 2 the contractor shall provide the following support, in accordance with appropriate technical direction:

DELIVERABLES	DATE
1. Update resources only, including publications, workshops, funding data, etc. Resources may also be specific to the region, utility type and size, and interests of the user. The contractor shall assume 1 update will be conducted during the option period.	TBD by technical direction.
2. Support the transition of the CRWU Toolbox to a third party who will maintain it in the future. Transition will include providing all coding and background documentation to third party to enable the posting of the Toolbox on third party site.	TBD by technical direction.

The contractor shall ensure it possesses superior technical and editorial writing skills to support all above-mentioned efforts. Skills must include, but are not limited to the following: grammar, spelling, punctuation, flow, sentence structure, readability, and reading-ease.

Task 4: Integration of Watershed Planning & Management and Integrated Water Resources Management Planning Processes into CRWU Efforts

Incorporating future climate conditions requires a robust planning approach that includes risk assessment and adaptive management of water resources. Integrated water resources planning and management processes are well suited to include climate change as a planning element.

Subtask 4.A: Coordinate and Expand Links with Climate Ready Estuaries Program

Task Manager: John Whiter

There are potential linkages between EPA's CRWU initiative and the Climate Ready Estuaries program that provides support for climate adaptation in the National Estuary Program (NEP). As part of their work, Climate Ready Estuaries partners, and other National Estuary Programs are increasingly involving water infrastructure partners. The National Estuary Program provides an opportunity to utilize an existing EPA funded, place-based program to achieve the goals of the CRWU program. In addition, due to the work already completed by the Climate Ready Estuaries program and other NEP climate related efforts, a number of lessons learned and information could be utilized from this program (i.e., stakeholder engagement, adaptation planning, etc.).

One goal will be to ensure that National Estuary Programs are connected to the water sector utilities in their study area to address climate change impacts, thereby strengthening the relationship between the Climate Ready Estuaries program and the CRWU initiative.

During Option Period 2 the contractor shall provide the following support, in accordance with appropriate technical direction (travel estimates included in the table below):

DELIVERABLES	DATE
1. Continue to support the use of CREAT and CRWU linkages between NEPs and local utilities.	TBD by technical direction.
2. Participate in conference calls (assume 3) with the State of NJ Dischargers and NEP, as well as EPA Region 2 Office pilot working group.	TBD by technical direction.

3. Assist in preparing for and holding a 1.5 day in-person or web-x training / workshop with the State of NJ Dischargers (11 utilities), other stakeholders, and the NEP, as well as EPA Region 2 Office. Workshop to be held in NJ, exact location TBD. The contractor shall capture and document the process, outcomes, and lesson learned from the workshop. Assume travel for 1 contractor.	TBD by technical direction.
4. Support an additional CRE, CRWU, and NEP project in a location to be identified. The contractor shall capture and document the process, outcomes, and lesson learned from the project. Assume travel for 1 contractor.	TBD by technical direction.
5. Provide one 60 minute webinar on CRE, CRWU, NEP projects to date.	TBD by technical direction.

Subtask 4.B Support the Implementation of IWRM Processes to Meet Climate Adaptation Goals
Task Manager: Curt Baranowski

Many local, regional, state and national agencies around the world are starting to plan for climate change. Water resources can play a significant role in mitigating future impacts of climate change by reducing greenhouse gas emissions. In addition, water resources projects need to adapt to those climate change impacts that are unavoidable and, in some cases, already being observed. Climate change can impact, and is already impacting, water quality, aquatic life, water supplies, and water demands.

The contractor will support EPA in its efforts to pursue opportunities to identify climate change and IWRM linkages and assist in providing support to the water sector to implement climate adaptation as part of IWRM.

During Option Period 2 the contractor shall provide the following support, in accordance with appropriate technical direction:

DEIVERABLES	DATE
1. Develop supporting materials that address broad programmatic sector implementation of IWRM, as recommended by the NDWAC CRWU working group.	TBD by technical direction.
2. Develop outreach materials to support water sector IWRM implementation for climate adaptation. Possible development of a "national" or other "regional" handbook(s) based on the <i>California Regional Water Management Planning with Climate Change Adaptation and Mitigation Handbook</i> .	TBD by technical direction.

Task 5: Overarching Communications and Outreach
Task Manager: Curt Baranowski

A. Agency Document Assistance

The contractor shall support the EPA by providing technical assistance needed to gather information to write, review, and/or disseminate documents relative to the scope of this work assignment. The contractor will provide additional assistance by compiling and addressing stakeholder comments and updating documents as new information becomes available.

Deliverables: Draft and final documents and reports that: 1) are researched and reviewed; 2) address and incorporate stakeholder comments; and 3) are appropriately updated and/or finalized; conducted in coordination with Task 1.

B External Document Assistance

The contractor shall support the review and dissemination of documents created by other agencies or stakeholders. The EPA WAM shall provide these documents to the contractor, and shall specify the type of review required in written technical direction.

The contractor shall also develop information and outreach materials for the water sector as requested in written technical direction by the EPA WAM. This may include but not be limited to the development of fact sheets, presentations, exercises, and briefings. The contractor shall also support actions and necessary materials required for conference attendance. This may include but not be limited to the development and submission of abstracts and the creation of presentations and/or talking points.

Deliverables: Draft and final documents and reports that: 1) are researched and reviewed; 2) address and incorporate stakeholder comments; and 3) are appropriately updated and/or finalized. The development of communication and outreach materials shall also be included in this task; conducted in coordination with Task 1.

C. Scientific and Technical Support

Under this task, the contractor shall provide other scientific and technical support to facilitate and enhance EPA's CRWU efforts. Examples of the type of actions that may require support may include, but is not limited to literature searches on climate science or integrated water resources management issues. Specific activities under this task will be assigned through written technical direction in response to the EPA's support needs.

Deliverables: These activities will include support for the Climate Ready Water Utilities program, literature searches, collecting and addressing comments. For estimation purposes assume five (5) literature searches.

D. Meeting Support

The contractor shall provide logistical, facilitation and administrative support to include, but not be limited to, facilitating and supporting meeting planning activities, delivery of sessions, development of minutes and action items, and summary evaluation and report-out. The contractor shall arrange for facilities, in accordance with Agency requirements, suggest locations, and make necessary arrangements for meetings or conferences as requested by written technical direction by the WAM. The contractor shall identify potential speakers and participants to attend EPA sponsored events, issue invitations, and conduct pre-meeting and on-

site registration activities. The contractor shall develop and assemble agendas, supplemental materials (e.g., handouts, presentations, participant list), and other preparatory activities as needed. The contractor shall facilitate sessions and provide support to invited presenters as required. Work on task activities shall begin upon receipt of written technical direction from the EPA WAM. The contractor shall adhere to Agency requirements for reserving meeting space. Any speakers or experts identified for travel reimbursement must have a clear role in the meeting/workshop and must have consultant agreements in place.

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, shall be obtained by the EPA PO as needed and provided to the Contracting Officer. Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the PO.

Deliverables: Logistics for meeting and facilitation support that enables stakeholder coordination through workshops, conferences, technical sessions and training events. This includes fact sheet development, presentations, exercises and briefings.

- For estimation purposes, the contractor shall assume up to 3 meetings at non-EPA facilities (contractor will not secure space for meetings at non-EPA facilities), 7 local meetings at EPA facilities, and 5 conference calls.
- Assume travel for four (4) off-site conferences under Task 5.

The contractor shall ensure they possess superior technical and editorial writing skills to support all above-mentioned efforts. Skills must include, but are not limited to the following: grammar, spelling, punctuation, flow, sentence structure, readability, and reading-ease.

V. SCHEDULE DELIVERABLES

Task	Deliverable	Estimated Quantity	Due Date
0	Work plan	1	20 days after issuance of work assignment
0	Monthly progress and financial reports.	11	TBD by Technical Direction
1	Develop and distribute materials for climate change education, outreach, and training.	7	TBD by Technical Direction
1a	Adaptation Strategies Guide updates and improvement.	1	TBD by Technical Direction
2	Development of the Adaptive Response Framework web site	0	TBD by Technical Direction
3	CRWU Toolbox improvement	1	TBD by Technical Direction
4	Integration of Watershed Planning and Management	NA	TBD by Technical Direction

4a	Coordinate and expand links with Climate Ready Estuaries program	3	TBD by Technical Direction
4b	Support the Implementation of IWRM Processes to Meet Climate Adaptation Goals	1	TBD by Technical Direction
5	Overarching Communications and Outreach.	15	TBD by Technical Direction

VI REPORTING REQUIREMENTS

Monthly Progress Reports (including a progress evaluation discussion)

Financial Reports

Project Specific QAPP (if applicable)

VII GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, *Acquisition of environmentally preferable meeting and conference services (May 2007)*, for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

VIII CONFERENCE/MEETING GUIDELINES AND LIMITATIONS

The contractor shall immediately alert the EPA WAM to any anticipated event under the work assignment which may result in incurring an estimated \$25,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WAM will then prepare internal approval paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

QUALITY ASSURANCE SURVEILLANCE PLAN
For the Water Security Division's
Technical, Analytical, and Regulatory Mission Support
Performance Work Statement

Quality Assurance Surveillance Plan

The requirements contained in this work assignment are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) that is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The Work Assignment Manager shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Project Officer in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.

General Management and Administration			
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/ Disincentives
Management and Communications: The Contractor shall maintain contact with the EPA CO, PO and WAM throughout the performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA WAM. In cases where issues have a direct impact on project schedules or cost, the contractor shall provide options for EPA's consideration on resolving or mitigating the impacts.	Any issues that impact project schedules or cost shall be brought to the attention of the appropriate EPA WAM within 3 business days of occurrence.	100% of active work assignments under the contract will be reviewed by the EPA WAM monthly (via monthly progress report) to identify unreported issues. The EPA WAM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	Unsatisfactory rating under the category of Business Relations in the NIH Performance Evaluation System if two or more incidents occur during an applicable period of performance when the contractor does not meet the measurable performance standards for a given contract period.
Timeliness: Services and deliverables shall be in accordance with schedules stated in each work assignment or tasking document, unless amended or modified by an approved EPA action.	During any period of performance, 90% of all submitted deliverables shall be submitted no later than 5 business days past the due date.	100% of active work assignments under the contract will be reviewed by the EPA WAM monthly (via monthly progress report & milestones established for each deliverable) to compare actual delivery dates against those approved. The EPA WAM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	Unsatisfactory rating under the category of Timeliness in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.

<p>Cost Management and Control: The Contractor shall monitor, track and accurately report level of effort, labor cost, other direct cost and fee expenditures to EPA through progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate time keeping.</p>	<p>The contractor shall manage costs to the level of approved ceiling on the work assignment. The contractor shall notify the WAM/PO when 75% of the approved funding ceiling for the work assignment is reached.</p>	<p>The EPA PO will routinely meet with the Contractor's Project Manager to discuss the work progress and contract and individual work assignment expenditures. The EPA PO shall review the Contractor's monthly progress reports and request the WAMs verification of expenditures and technical progress before authorizing invoice payments.</p>	<p>Unsatisfactory rating under the category of Cost Control in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.</p>
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<p>Technical Effort: The analyses or products developed by the contractor shall be factual and defensible and based on sound science and engineering. All data shall be collected from reputable sources and quality assurance measures shall be conducted in accordance with contract, agency requirements and any additional requirements outlined in individual work assignments or technical directives. Any work requiring the contractor to provide options or recommendations shall include the rationale used in selecting the option/recommendation and all other options and recommendations considered.</p>	<p>All analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the WAM in written technical direction, and should meet the objectives stated in the work assignment. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.</p> <p>Draft versions of a document shall require no more than two editorial revisions.</p>	<p>EPA will review all analyses and work products conducted by the Contractor and will independently consider the merit. EPA may opt to peer review analyses to further validate merit.</p> <p>The EPA WAM/TM (Task Manager) will review initial drafts to assess technical accuracy and editorial quality. The WAM/TM will identify all inaccuracies and needed edits and corrections to the contractor in the initial review of draft documents.</p>	<p>Unsatisfactory rating under the category of QUALITY OF PRODUCT OR SERVICE in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.</p>
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<p>Socio-Economic Utilization: The Contractor shall assess all agency requirements outlined in work assignments for opportunities to fully utilize the knowledge and experience of its socio-economic team members. Work shall be allocated in a manner that ensures the Contractor's annual subcontracting goals are met.</p>	<p>The Contractor shall meet a standard of at least 80% of the dollar goals outlined in their subcontracting plan during each period of performance, unless Agency priorities prevent or preclude such tasking.</p>	<p>EPA will monitor the contractor's utilization of socio-economic firms by reviewing the contractor's submittal of Standard Forms (SF) 294 and (SF) 295.</p>	<p>If less than 80% is reached during an applicable period of performance, the contractor shall outline the steps that will be taken to meet the annual goals outlined in their plan, or provide justification as to the rationale for the lack of meeting the subcontracting plan goals. Performance that does not meet the stated goals without sufficient justification will be reported as an Unsatisfactory rating under the category of BUSINESS RELATIONS, and MEETING SDB SUBCONTRACTING REQUIREMENTS in the NIH Performance Evaluation System.</p>
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EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-10				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-10-060			Contract Period 11/30/2010 To 07/31/2013			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Tech Support for CRWU				
Contractor COMPUTER SCIENCES CORPORATION					Specify Section and paragraph of Contract SOW 2.10, 2.4, 2.15, 2.16, 3.1.13, 3.1.14, 3.1.18					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 08/01/2012 To 07/31/2013					
Comments: This action increases incremental funding on the work assignment by an amount of \$50,000 to a revised amount of \$301,503. Funded technical labor is increased to 3100 directlabor hours.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 3,500						
11/30/2010 To 07/31/2013										
This Action:				-133						
Total:				3,367						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Curt Baranowski							Branch/Mail Code:			
							Phone Number 202-564-0636			
_____ (Signature) (Date)							FAX Number:			
Project Officer Name Nancy Muzzy							Branch/Mail Code:			
							Phone Number: 513-569-7864			
_____ (Signature) (Date)							FAX Number:			
Other Agency Official Name							Branch/Mail Code:			
							Phone Number:			
_____ (Signature) (Date)							FAX Number:			
Contracting Official Name Cathy Basu							Branch/Mail Code:			
							Phone Number: 513-487-2042			
_____ (Signature) (Date)							FAX Number:			

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 2-10				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-C-10-060			Contract Period 11/30/2010 To 07/31/2013			Title of Work Assignment/SF Site Name				
			Base Option Period Number 2			Tech Support for CRWU				
Contractor COMPUTER SCIENCES CORPORATION					Specify Section and paragraph of Contract SOW 2.10, 2.4, 2.15, 2.16					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 08/01/2012 To 07/31/2013					
Comments: This action allocates incremental funding to fully fund the Work Plan at an amount of \$346,850. Total direct labor hours are increased to 3500, and total technical hours increased to 3367 LOE.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:			LOE:					
11/30/2010 To 07/31/2013										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Curt Baranowski							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number 202-564-0636			
							FAX Number:			
Project Officer Name Nancy Muzzy							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 513-569-7864			
							FAX Number:			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number:			
							FAX Number:			
Contracting Official Name Cathy Basu							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 513-487-2042			
							FAX Number:			

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div style="text-align: center;"> <p>United States Environmental Protection Agency Washington, DC 20460</p> <h2 style="margin: 0;">Work Assignment</h2> </div> </div>		Work Assignment Number 2-10								
Contract Number EP-C-10-060		<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Other </div> <div> <input checked="" type="checkbox"/> Amendment Number: 000003 </div> </div>								
Contract Period 11/30/2010 To 07/31/2014 Base Option Period Number 2		Title of Work Assignment/SF Site Name Tech Support for CRWU								
Contractor COMPUTER SCIENCES CORPORATION		Specify Section and paragraph of Contract SOW 2.10, 2.4, 2.15, 2.16								
Purpose: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input type="checkbox"/> Work Assignment <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Work Plan Approval </div> <div> <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Incremental Funding </div> </div>		Period of Performance From 08/01/2012 To 07/31/2013								
Comments: This action incorporates Amendment 1, attached, which increases the scope of existing task 1. The Agency estimates an additional 605 technical LOE will be necessary for the amendment, and requests that a budget for the increased scope be submitted. No revised work plan is necessary. Total estimate tech LOE is 3972.										
<input type="checkbox"/> Superfund		<div style="text-align: center;">Accounting and Appropriations Data</div> <input checked="" type="checkbox"/> Non-Superfund								
<div style="display: flex; justify-content: space-between;"> <div> SFO (Max 2) <div style="border: 1px solid black; width: 30px; height: 20px; display: flex; align-items: center; justify-content: center;"> SFO </div> </div> <div> Note: To report additional accounting and appropriations date use EPA Form 1900-69A. </div> </div>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:			LOE:					
11/30/2010 To 07/31/2014										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Curt Baranowski <div style="display: flex; justify-content: space-between;"> <div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)</div> </div> <div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Date)</div> </div> </div>							Branch/Mail Code: Phone Number 202-564-0636 FAX Number:			
Project Officer Name Nancy Muzzy <div style="display: flex; justify-content: space-between;"> <div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)</div> </div> <div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Date)</div> </div> </div>							Branch/Mail Code: Phone Number: 513-569-7864 FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)</div> </div> <div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Date)</div> </div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Cathy Basu <div style="display: flex; justify-content: space-between;"> <div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)</div> </div> <div> <div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Date)</div> </div> </div>							Branch/Mail Code: Phone Number: 513-487-2042 FAX Number:			

**WORK ASSIGNMENT
PERFORMANCE WORK STATEMENT**

Contract No. EP-C-10-060

Work Assignment: 2-10, Amendment 3

WAM: Curt Baranowski

Threats Analysis, Prevention, & Preparedness Branch

Water Security Division/ Office of Water

Phone: (202) 564-0636

FAX: (202) 566-0055

E mail: baranowski.curt@epa.gov

Mail code: 4608T

1200 Pennsylvania Ave., NW

Washington, DC 20460

Alternate WAM: John Whitley

Security Assistance Branch

Water Security Division/ Office of Water

Phone: (202) 564-1929

FAX: (202) 566-0055

E mail: whitley.john@epa.gov

Mail code: 4608T

1200 Pennsylvania Ave, NW

Washington, DC 20460

Task Managers: John Whitley and Curt Baranowski

IOE 3,500 hours, plus this amendment of 605 hours

Period of Performance: August 1, 2012 to July 31, 2013

Title: Climate Ready Water Utilities (CRWU) Related Activities -- Support, Education, Outreach, Communication, Training, and Coordination

PWS Sections: 2.10, 2.4, 2.15, 2.16, 3.1.13, 3.1.14, 3.1.18

I. PURPOSE

The purpose of this work assignment amendment is to increase the scope of the requirements for related work for additional work under existing Task 1: Climate Ready Water Utilities (CRWU) and Climate Change Support, Education, Outreach, and Training. Specifics related to this additional work will be defined with appropriate technical direction.

Additional effort is required to support CRWU and the Climate Resilience Evaluation and Awareness Tool (CREAT); explicitly to address additional efforts related to: 1) workshops; 2) webinars; and 3) tool development that are already included in the current work assignment language. Summary of the additional elements of scope are outlined here, and are also clearly specified in the deliverable table included with the work assignment.

1. In April 2013, EPA Headquarters, with support from the contractor, conducted two workshops on CRWU and our CREAT in EPA's Region 2. These workshops assisted drinking water and wastewater utilities recovering from Superstorm Sandy. The work focused on how to consider climate projections as utilities start and continue to rebuild in the Sandy aftermath; both workshops were extremely successful.

It is this particular effort that will be expanded, by providing similar workshops in Region 1 (New England) for those facilities and communities impacted by the storm and to prepare others for possible future extreme weather events. The Agency estimates the additional support will require an additional LOE of 180 hours. Specifics for additional workshop(s) in Region 1 will be provided through technical direction.

2. Additionally, over this option period a series of webinars have been provided on CRWU efforts, again these efforts have been very successful, with more than 100 participants on each webinar. The Water Utility Climate Alliance (WUCA), a group of more than 10 of the nation's largest water sector utilities that are highly proactive on climate matters, has reached out and would like to work with us on future webinars. Working with the WUCA would be highly beneficial to the Agency and CRWU efforts.

The Agency is interested in increasing its presence related to webinars. New content for the webinars, addressing the interest of the Water Utility Climate Alliance (WUCA) would help support the nation's largest water sector utilities that are highly proactive on climate matters. The Agency estimates the amount of resources related to supporting these webinars will entail an additional LOE of 200 hours.

3. The current version of the CRWU Adaptation Strategies Guide requires potential updates that will include sustainability and water conservation strategies for the existing guide. The Agency estimates an additional LOE of 225 hours may be necessary to support these updates.

Task 1: CRWU and Climate Change Support, Education, Outreach, and Training

In alignment with the findings and recommendations within the NDWAC CRWU report, EPA will continue to develop and implement its Climate Ready Water Utilities initiative. EPA will work with many other partners and stakeholders to implement this program. These groups include, but are not limited to, other EPA offices such as the Climate Ready Estuaries program; members of the CRWU NDWAC working group; federal, state, and local government partners; public agency actors; interdependent sectors; and water sector associations.

The contractor shall work with these partners and stakeholders to assist water sector utilities gain a better understanding of climate science and how they can implement aspects of the CRWU initiative to prepare for potential climate change-related impacts. The contractor will also support the EPA in identifying water sector climate-related research needs.

During Option Period 2 the contractor shall provide the following support, in accordance with appropriate technical direction as follows in the tables below.

All new work associated with amendment is identified in **bold text** for “Deliverables” 3 and 6 under Task 1 and for “Deliverable” 2 under Subtask 1A in the tables below.

<u>DELIVERABLES</u>	<u>DATE</u>
1. Develop outreach materials such as tutorials and/or fact sheets on the CRWU initiatives for conferences or other purposes. These materials may be abstracts, handouts, presentations, journal articles, briefings, etc. Assume development of five (5) individual products for estimation purposes.	TBD by technical direction.

2. NY State Department of Environmental Conservation (NYS DEC) CREAT2.0 Training -- participate in conference calls (assume 3) with the NYS DEC, other stakeholders, and EPA Region 2 Office.	TBD by technical direction.
3. Develop, prepare for, and hold a 1.5 day in-person or web-x CREAT2.0 training / workshop with the NYS DEC, other stakeholders, and EPA Region 2 Office. Workshop to be held in NY, exact location TBD; will assist NYS DEC build CRWU concepts into their programs. The contractor shall capture and document the process, outcomes, and lesson learned from the workshop. Assume travel for 1 contractor. a. Provide CREAT and climate science subject matter expertise for two workshops in the New England region of the United States. Assume travel for two contractors.	TBD by technical direction.
4. Participate on follow-up conference calls (assume 2 total) with the above-mentioned NY group to solicit any additional feedback on the training / workshop.	TBD by technical direction.
5. Provide technical assistance for questions and help regarding CREAT2.0. Catalog feedback on CREAT2.0. The contractor shall assume 10 calls per month.	TBD by technical direction.
6. CRWU training and outreach. The contractor shall support EPA in the development and provision of webcasts promoting the holistic approach to CRWU resources (e.g., Toolbox, Adaptation Strategies Guide, Workshop Planner, CREAT, and NOAA RSAs). The CRWU webcasts will be held in 2 parts that will run no longer than 45 minutes each. The contractor shall assume 8 webcasts that will be provided over the option period. The contractor shall assume 2 individual webcasts on CREAT a. Develop content for three climate related webinars in coordination with the WUCA.	TBD by technical direction.
7. Credit ratings reward pricing and infrastructure plans that encourage increased water use and revenue growth with disregard for even near-term supply constraints and likely disruptions due to climate and extreme weather changes. No current ratings methodologies reward water utilities with incentives for having water pricing that reflects scarcity, climate readiness, and encourages conservation. Working with rate setting agencies and insurers, EPA will assist the organizations in developing criteria and incentives that will help rate setters to: • Understand the water sector's exposure to persistent drought, floods, temperature changes, and sea-level rise	TBD by technical direction.

<p>resulting from long-term climatic changes;</p> <ul style="list-style-type: none"> • Encourage asset managers and insurers to assess and engage with utilities on water risks; • Request guidance from financial regulators for better disclosure of water and climate-related risks by municipal utilities; and • Encourage the use of green infrastructure that restores natural hydrologic systems, promotes rainwater harvesting and natural water capture, thus recharging aquifers and protecting water supplies. <p>The contractor shall support EPA with the above-mentioned work with credit ratings agencies, insurers, and financial regulators to identify risk to water utilities from climate and extreme weather changes. Assume the development of 2 documents.</p>	
8. The contractor shall assist EPA in conducting a climate change related risk assessment at combined drinking water and wastewater utility using CREAT2.0. The contractor shall produce a utility-level risk assessment report using CREAT2.0 functionality, as well as capture and document the process, outcomes, and lesson learned from the assessment. Assume travel for 2 contractors (5 working days) and 3 webcasts.	TBD by technical direction.

Subtask 1A: Adaptation Strategies Guide (ASG) Updates and Enhancements.

Task Manager: Curt Baranowski

During Option Period 2 the contractor shall provide the following support, in accordance with appropriate technical direction:

<u>DELIVERABLES</u>	<u>DATE</u>
1. Updates to the ASG will ensure stakeholder comments are incorporated and that the climate science data and other content of the guide are consistent with the current knowledge and needs of the water sector. Climate science data for the ASG comes from existing peer-reviewed sources such as the U.S. Global Change Research Program reports; data is developed by more than 10 different federal agencies (e.g., USGS, NOAA, NASA, and EPA). The contractor should assume 1 ASG update for estimation purposes.	TBD by technical direction.
2. Enhancements to the ASG to add green infrastructure and energy efficiency components. a. Revise the existing ASG to include sustainability and water conservation components.	TBD by technical direction.

For all tasks, the contractor shall format all deliverables in Century Gothic, 10-point type. All draft documents shall also have continuous line numbers.

The contractor shall ensure it possesses superior technical and editorial writing skills to support all above-mentioned efforts. Skills must include, but are not limited to the following: grammar, spelling, punctuation, flow, sentence structure, readability, and reading-ease.

NOTE All other aspects of this work assignment remain unchanged.